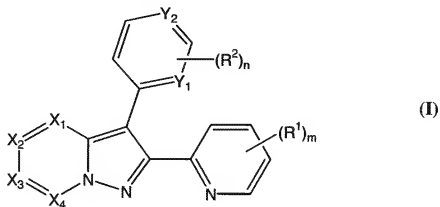


Amended claims

What is claimed is:

1. (Previously presented) A compound of the following formula:



wherein

each of X_1 , X_2 , X_3 , and X_4 is independently CR^x or N; provided that only two of X_1 , X_2 , X_3 , and X_4 can be N simultaneously;

each of Y_1 and Y_2 is independently CR^y or N; provided that at least one of Y_1 and Y_2 must be N;

each R^1 is independently alkyl, alkenyl, alkynyl, alkoxy, acyl, halo, hydroxy, amino, nitro, cyano, guanadino, amidino, carboxy, sulfo, mercapto, alkylsulfanyl, alkylsulfanyl, alkylsulfonyl, aminocarbonyl, alkylcarbonylamino, alkylsulfonylamino, alkoxycarbonyl, alkylcarbonyloxy, urea, thiourea, sulfamoyl, sulfamide, carbamoyl, cycloalkyl, cycloalkyloxy, cycloalkylsulfanyl, heterocycloalkyl, heterocycloalkyloxy, heterocycloalkylsulfanyl, aryl, aryloxy, arylsulfanyl, aroyl, heteroaryl, heteroaryloxy, heteroaryl-sulfanyl, or heteroaryl;

each R^2 is independently alkyl, alkenyl, alkynyl, acyl, halo, hydroxy, $-NH_2$, $-NH(alkyl)$, $-N(alkyl)_2$, $-NH(cycloalkyl)$, $-N(alkyl)(cycloalkyl)$, $-NH(heterocycloalkyl)$, $-NH(heteroaryl)$, $-NH-alkyl-heterocycloalkyl$, $-NH-alkyl-heteroaryl$, $-NH(aralkyl)$, cycloalkyl, (cycloalkyl)alkyl, aryl, aralkyl, aroyl, heterocycloalkyl, (heterocycloalkyl)alkyl, heteroaryl, heteroaralkyl, heteroaroyl, nitro, cyano, guanadino, amidino, carboxy, sulfo, mercapto, alkoxy, cycloalkyloxy, cycloalkyl-alkoxy, aryloxy, arylalkoxy, heterocycloalkyloxy, (heterocycloalkyl)alkoxy, heteroaryloxy,

heteroarylalkoxy, alkylsulfanyl, cycloalkylsulfanyl, (cycloalkyl)alkylsulfanyl, arylsulfanyl, aralkylsulfanyl, heterocycloalkylsulfanyl, (heterocycloalkyl)alkylsulfanyl, heteroarylsulfanyl, heteroarylalkylsulfanyl, alkylsulfanyl, alkylsulfonyl, aminocarbonyl, aminosulfonyl, alkylcarbonylamino, cycloalkylcarbonylamino, (cycloalkyl)alkylcarbonylamino, arylcarbonylamino, aralkylcarbonylamino, (heterocycloalkyl)carbonylamino, (heterocycloalkyl)alkylcarbonylamino, heteroarylcarbonylamino, heteroaralkylcarbonylamino, alkoxy carbonylaminoalkylamino, (heteroaryl)arylcarbonylaminoalkylamino, heteroaralkylcarbonylaminoalkylamino, (heteroaryl)arylsulfonylaminoalkylcarbonylaminoalkylamino, arylsulfonylaminoalkylamino, alkoxy carbonyl, alkylcarbonyloxy, urea, thiourea, sulfamoyl, sulfamide, or carbamoyl;

m is 0, 1, 2, 3, or 4; provided that when $m \geq 2$, two adjacent R^1 groups can join together to form a 4- to 8-membered optionally substituted cyclic moiety;

n is 0, 1, 2, or 3; provided that when $n \geq 2$, two adjacent R^2 groups can join together to form a 4- to 8-membered optionally substituted cyclic moiety; and

each of R^x and R^y is independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, acyl, halo, hydroxy, amino, nitro, cyano, guanidino, amidino, carboxy, sulfo, mercapto, alkylsulfanyl, alkylsulfanyl, alkylsulfonyl, cycloalkylcarbonyl, (cycloalkyl)alkylcarbonyl, aroyl, aralkylcarbonyl, heterocycloalkylcarbonyl, (heterocycloalkyl)acyl, heteroaroyl, (heteroaryl)acyl, aminocarbonyl, alkylcarbonylamino, (amino)aminocarbonyl, alkylsulfonylaminoalkylcarbonyl, alkylsulfonylamino, cycloalkylcarbonylamino, cycloalkylsulfonylamino, (cycloalkyl)alkylcarbonylamino, (cycloalkyl)alkylsulfonylamino, arylcarbonylamino, arylsulfonylamino, aralkylcarbonylamino, aralkylsulfonylamino, (heterocycloalkyl)carbonylamino, (heterocycloalkyl)sulfonylamino, (heterocycloalkyl)alkylcarbonylamino, (heterocycloalkyl)alkylsulfonylamino, heteroarylcarbonylamino, heteroarylsulfonylamino, heteroaralkylcarbonylamino, heteroaralkylsulfonylamino, alkoxy carbonyl, alkylcarbonyloxy, urea, thiourea, sulfamoyl, sulfamide, carbamoyl, cycloalkyl, cycloalkyloxy, cycloalkylsulfanyl, (cycloalkyl)alkyl, (cycloalkyl)alkoxy, (cycloalkyl)alkylsulfanyl, heterocycloalkyl, heterocycloalkyloxy, heterocycloalkylsulfanyl, (heterocycloalkyl)alkyl, (heterocycloalkyl)alkoxy,

(heterocycloalkyl)alkylsulfanyl, aryl, aryloxy, arylsulfanyl, aralkyl, aralkyloxy, aralkylsulfanyl, arylalkenyl, arylalkynyl, heteroaryl, heteroaryloxy, heteroaryl-sulfanyl, heteroaralkyl, (heteroaryl)alkoxy, or (heteroaryl)alkylsulfanyl; or a pharmaceutically acceptable salt [~~or N-oxide~~] thereof.

2. – 29. (Cancelled).

30. (Original) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

31. (Currently amended) A pharmaceutical composition comprising a compound of claim [[29]] -- 1 -- and a pharmaceutically acceptable carrier.

32. (Original) A method of inhibiting the TGFβ signaling pathway in a subject, the method comprising administering to said subject with an effective amount of a compound of claim 1.

33. (Currently amended) A method of inhibiting the TGFβ signaling pathway in a subject, the method comprising administering to said subject with an effective amount of a compound of claim [[29]] -- 1 --.

34. (Original) A method of inhibiting the TGFβ type I receptor in a cell, the method comprising the step of contacting said cell with an effective amount of a compound of claim 1.

35. (Currently amended) A method of inhibiting the TGFβ type I receptor in a cell, the method comprising the step of contacting said cell with an effective amount of a compound of claim [[29]] -- 1 --.

36. (Withdrawn) A method of reducing the accumulation of excess extracellular matrix induced by TGF β in a subject, the method comprising administering to said subject an effective amount of a compound of claim 1.
37. (Withdrawn) A method of reducing the accumulation of excess extracellular matrix induced by TGF β in a subject, the method comprising administering to said subject an effective amount of a compound of claim 29.
38. (Withdrawn) A method of treating or preventing fibrotic condition in a subject, the method comprising administering to said subject an effective amount of a compound of claim 1.
39. (Withdrawn) A method of treating or preventing fibrotic condition in a subject, the method comprising administering to said subject an effective amount of a compound of claim 29.
40. (Withdrawn) The method of claim 38 or 39, wherein the fibrotic condition is selected from the group consisting of scleroderma, lupus nephritis, connective tissue disease, wound healing, surgical scarring, spinal cord injury, CNS scarring, acute lung injury, idiopathic pulmonary fibrosis, chronic obstructive pulmonary disease, adult respiratory distress syndrome, acute lung injury, drug-induced lung injury, glomerulonephritis, diabetic nephropathy, hypertension-induced nephropathy, hepatic or biliary fibrosis, liver cirrhosis, primary biliary cirrhosis, fatty liver disease, primary sclerosing cholangitis, restenosis, cardiac fibrosis, ophthalmic scarring, fibrosclerosis, fibrotic cancers, fibroids, fibroma, fibroadenomas, fibrosarcomas, transplant arteriopathy, and keloid.
41. (Withdrawn) A method of inhibiting metastasis of tumor cells in a subject, the method comprising administering to said subject an effective amount of a compound of claim 1.

42. (Withdrawn amended) A method of inhibiting metastasis of tumor cells in a subject, the method comprising administering to said subject an effective amount of a compound of claim [[29-]] -- 64 --.

43. (Withdrawn) A method of treating a disease or disorder mediated by an overexpression of TGF β , the method comprising administering to a subject in need of such treatment an effective amount of a compound of claim 1.

44. (Withdrawn amended) A method of treating a disease or disorder mediated by an overexpression of TGF β , the method comprising administering to a subject in need of such treatment an effective amount of a compound of claim [[29-]] -- 64 --.

45. (Withdrawn) The method of claim 43 or claim 44, said disease or disorder being selected from the group consisting of demyelination of neurons in multiple sclerosis, Alzheimer's disease, cerebral angiopathy, squamous cell carcinomas, multiple myeloma, melanoma, glioma, glioblastomas, leukemia, and carcinomas of the lung, breast, ovary, cervix, liver, biliary tract, gastrointestinal tract, pancreas, prostate, and head and neck.

46. (Previously presented) The compound of claim 1, wherein each of X₁, X₂, X₃, and X₄ is independently CR^x,
each R^x is independently hydrogen.

47. (Previously presented) The compound of claim 46, wherein
m is 0, 1 or 2.

48. (Previously presented) The compound of claim 47, wherein
both Y₁ and Y₂ are N.

49. (Previously presented) The compound of claim 48 wherein
each R¹ is independently unsubstituted alkyl, hydroxyalkyl, haloalkyl, aminoalkyl, aryloxyalkyl, heteroaralkyloxyalkyl, unsubstituted alkenyl, alkoxy, acyl,

halo, hydroxy, carboxy, cyano, guanadino, amidino, -NH₂, monoalkylamino, dialkylamino, monocycloalkylamino, monoheterocycloalkylamino, monoheteroaryl-amino, mono(heterocycloalkyl)amino, mono(aryl)amino, mono(heteroaryl)amino, -N(alkyl)(cycloalkyl), mercapto, alkylsulfanyl, alkylsulfanyl, alkylsulfonyl, -CONH₂, -CONH(alkyl), -CO-N(alkyl)₂, -NH-CO-alkyl, -N(alkyl)-CO-alkyl, -CO₂-alkyl, -O-CO-alkyl, -SO₂-NH₂, -SO₂-NH(alkyl), -SO₂-N(alkyl)₂, cycloalkyl, heterocycloalkyl, or heteroaryl.

50. (Previously presented) The compound of claim 49,

wherein n is 1 or 2 and R² is independently and each R² is independently unsubstituted alkyl, hydroxyalkyl, haloalkyl, aminoalkyl, aryloxyalkyl, heteroalkyloxyalkyl, alkoxy, acyl, halo, hydroxy, carboxy, cyano, guanadino, amidino, -NH₂, monoalkylamino, dialkylamino, monocycloalkylamino, monoheterocycloalkyl-amino, monoheteroaryl-amino, mono(heterocycloalkyl)alkyl)amino, mono(heteroaryl)amino, -N(alkyl)(cycloalkyl), mercapto, alkylsulfanyl, alkylsulfanyl, alkylsulfonyl, -CONH₂, -CONH(alkyl), -CO-N(alkyl)₂, -NH-CO-alkyl, -N(alkyl)-CO-alkyl, -CO₂-alkyl, -O-CO-alkyl, -SO₂-NH₂, -SO₂-NH(alkyl), -SO₂-N(alkyl)₂, -NH-SO₂-alkyl, -N(alkyl)-SO₂-alkyl, -NH-CO-NH(alkyl), -N(alkyl)-CO-NH(alkyl), -NH-SO₂-NH(alkyl), -N(alkyl)-SO₂-NH(alkyl), heterocycloalkyl, or heteroaryl.

51. (Previously presented) The compound of claim 50, wherein,

each R¹ is independently unsubstituted alkyl, hydroxyalkyl, haloalkyl, aminoalkyl, aryloxyalkyl, heteroalkyloxyalkyl, unsubstituted alkenyl, alkoxy, acyl, halo, hydroxy, carboxy, cyano, guanadino, amidino, amino, carboxy, mercapto, alkylsulfanyl, alkylsulfanyl, alkylsulfonyl, aminocarbonyl, alkylcarbonylamino, alkoxycarbonyl, alkylcarbonyloxy, alkylsulfonyl, sulfamoyl, cycloalkyl, heterocycloalkyl, (heterocycloalkyl)alkyl, heteroaryl, or heteroaryl.

52. (Previously presented) The compound of claim 51, wherein,

wherein n is 1 and each R² is independently guanadino, amidino, -NH₂, monoalkylamino, dialkylamino, monocycloalkylamino, monoheterocycloalkylamino,

monoheteroaryl amino, mono(heterocycloalkyl)alkyl amino, mono(heteroalkyl) amino, -NH-CO-NH(alkyl), -N(alkyl)-CO-NH(alkyl), -NH-SO₂-NH(alkyl), -N(alkyl)-SO₂-NH(alkyl), heterocycloalkyl, or heteroaryl.

53. (Previously presented) The compound of claim 50, wherein wherein R² is substituted at the 3-position.
54. (Previously presented) A compound of claim 52, selected from,
4-(2-pyridin-2-yl-pyrazolo[1,5-a]pyridin-3-yl)-pyrimidin-2-ylamine,
4-[2-(6-methyl-pyridin-2-yl)-pyrazolo[1,5-a]pyridin-3-yl]-pyrimidin-2-ylamine,
2-(6-methyl-pyridin-2-yl)-3-(2-methylsulfanyl-pyrimidin-4-yl)-pyrazolo[1,5-a]pyridine,
4-[2-(6-chloro-pyridin-2-yl)-pyrazolo[1,5-c]pyrimidin-3-yl]-pyrimidin-2-ylamine,
2-(6-methyl-pyridin-2-yl)-3-(2-morpholin-4-yl-pyrimidin-4-yl)-pyrazolo[1,5-c]pyrimidine,
4-[2-(6-methyl-pyridin-2-yl)-pyrazolo[1,5-a]pyrazin-3-yl]-pyrimidin-2-ylamine,
4-[2-(6-methyl-pyridin-2-yl)-pyrazolo[1,5-a]pyrimidin-3-yl]-pyrimidin-2-ylamine,
4-[2-(6-methyl-pyridin-2-yl)-pyrazolo[1,5-c]pyrimidin-3-yl]-pyrimidin-2-ylamine, or a pharmaceutically acceptable salt.